UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/454,646	12/06/1999	David Carroll Challener	RP9-98-055	4026

EXAMINER
KIM, JUNG W

ART UNIT	PAPER NUMBER
2132	

25299   7590   05/12/2004

IBM CORPORATION
PO BOX 12195
DEPT 9CCA, BLDG 002
RESEARCH TRIANGLE PARK, NC 27709

DATE MAILED: 05/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

> A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
> - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
> - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
> - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
> - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
>   Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _29 March 2004_.

2a) ☐ This action is **FINAL.**   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-10_ is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-10_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a) ☐ All   b) ☐ Some * c) ☐ None of:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____.

        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
     Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-10 have been examined.

Claim Rejections - 35 USC § 112

2.   Claims 1 and 7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Both claims define the limitation that a variable security profile specifies a variable number of unsuccessful **power-on** password attempts permitted **based upon** at least one other factor chosen from time of day, day of week and security level of authorization of the user. This limitation is not enabled in the specification.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4.   Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Frisch Essential System Administration 2nd Edition (hereinafter Frisch). As per claims 1-4, Frisch discloses a variable security profile accessed and updated by means of a

plurality of methodologies within a UNIX operating system. One methodology is a login

profile that provides a feature to allow or deny use of the personal computer based on

several user login characteristics such as the number of unsuccessful login attempts

and the number of weeks a password to an account remains unchanged (see Frisch,

pages 158-159, '/etc/default/login', Table 5-1, variable='IDLEWEEKS' & 'MAXTRYS').

Further, each logged on user is assigned a unique id and at least one group id, wherein

the pair of ids defines a security access level (see Frisch, page 146). The security

access level determines users privileges to read, write, and execute files, as well as

access to commands (see Frisch, pages 25-36). Of the users, the root user is afforded

the highest security level and can read, write, and execute any file on the system,

thereby enabling the root user to change the login profile as well as any file that updates

the security profile (see Frisch, page 5). Moreover, only the root user can change the

run level of the OS, which includes the following: run level 1 for system administration

state, run level s for single-user mode, and run level 2 for multi-user mode (see page

90, Table 4-1). As such, only the root user can change the run level security of the

system to a lower state. In addition, Unix enables a "normal user" (one without root

access) to establish a more secure state. An example of a normal user defined activity

includes changing file permissions on files owned by the user to more secure levels

(see Frisch, pages 381-386 and pages 25-36). Furthermore, Frisch discloses a feature

to log unsuccessful login attempts. Under the AIX version of Unix, the /etc/security/user

file lists several login profile attributes for each user including: the time of the last login,

unsuccessful login count, time of the last unsuccessful login, and the host machine of

the last unsuccessful login (see Frisch, page 262, 'Monitoring unsuccessful login

attempts'). Upon inspection of the /etc/security/user file, an administrator can

deny/restrict a user from accessing the operating system who has a suspicious login

history by updating the above methods to modify the security profile as taught by Frisch

(see Frisch, page 2, 3rd bullet). Finally, the security profile is generated automatically

when the system is turned on (see Frisch, pages 83-127, especially, pages 95-127,

'The UNIX Initialization Process and Startup Scripts'). The aforementioned cover claims

1-4.

5.   Referring to claims 5 and 6, Frisch teaches a system for establishing a level of

security in a computer having a memory and a stored operating system as outlined

above in the claim 4 rejection above under 35 U.S.C. 102(b). Although Frisch does not

expressly disclose using binary indicators to set the secure state level, binary fields are

the standard means for storing any digital information. As mentioned above, normal

users can change file permissions they own to more secure states and the root user can

alter the state of a system to less secure states by making file and login access less

restrictive and by changing the run level of the OS. All of these changes would be

reflected in memory as binary manipulations. Hence, the aforementioned cover claims

5 and 6.

6.   As per claims 7-9, they are method claims corresponding to the invention

outlined in the claim 1-6 rejections and they do not teach or define above the invention

outlined in the claim 1-6 rejections. Therefore, claims 7-9 are rejected as being

anticipated by Frisch for the same reasons set forth in the rejections of claims 1-6.

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8.   Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Frisch

and further in view of Schmidt U.S. Patent No. 5,912,621 (hereinafter Schmidt). Frisch

discloses a security methodology implemented on a personal computer as defined

above in the claim 9 rejection under 35 U.S.C. 102(b). Frisch does not teach a

response made by the operating system when the cover of the computer is removed.

Schmidt teaches a computer system that is responsive to the removal of its physical

encasing. Specifically, the invention disclosed by Schmidt is a computer cabinet

security state detection system whereby an auxiliary state element changes state in

response to the cover being opened. A state program is run when the auxiliary state

element detects the cover being removed to poll the status of the element. This state

report is further submitted to security personal for examination (see Schmidt, col. 1, line

51-col. 2, line 7). It would be obvious to one with ordinary skill in the art at the time the

invention was made to incorporate the computer cabinet security state detection system

into a personal computer with a UNIX operating system. Schmidt teaches motivation for

such an implementation: physical threats should be recorded and addressed to prevent

tampering of the physical devices of a computer in addition to conventional login and

network intrusion detection systems, and thereby enable a more robust computer

security system (see Schmidt, col. 1, lines 1-10 and lines 35-50).

Conclusion

The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

Watters et al. U.S. Patent No. 4,959,860.

Morisawa et al. U.S. Patent No. 5,537,544.

Garrett et al. U.S. Patent No. 6,397,337.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jung W Kim whose telephone number is (703) 305-

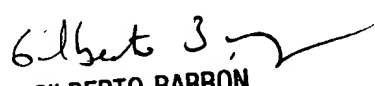8289. The examiner can normally be reached on M-F 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Gilberto Barron can be reached on (703) 305-1830. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Jung W Kim
Examiner
Art Unit 2132

Jk
May 7, 2004

GILBERTO BARRON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100